

General Disclaimer

One or more of the Following Statements may affect this Document

- This document has been reproduced from the best copy furnished by the organizational source. It is being released in the interest of making available as much information as possible.
- This document may contain data, which exceeds the sheet parameters. It was furnished in this condition by the organizational source and is the best copy available.
- This document may contain tone-on-tone or color graphs, charts and/or pictures, which have been reproduced in black and white.
- This document is paginated as submitted by the original source.
- Portions of this document are not fully legible due to the historical nature of some of the material. However, it is the best reproduction available from the original submission.

(NASA-CF-147148) HIGHLIGHTS OF THE CONTRACT
YF4F, 1 FEBRUARY 1974 TO 31 JANUARY 1975
Final Progress Report (University of
Southern Calif.) 15 EHC 43.50 CSCL 05A

N76-24074

Unclassified

wesrac

WESTERN RESEARCH APPLICATION CENTER



**GRADUATE SCHOOL OF BUSINESS ADMINISTRATION / UNIVERSITY OF SOUTHERN CALIFORNIA
LOS ANGELES, CALIFORNIA 90007 (213) 746-6133**

LETTER OF INTRODUCTION

The following is the final progress report of the Western Research Application Center (WESRAC), a NASA Industrial Application Center at the University of Southern California. This report is primarily concerned with the period 1 November 1974 to 31 January 1975, and will also sum up the highlights of the entire contract year, 1 February 1974 to 31 January 1975.

This report has been prepared in accordance with the specifications of NASA Contract No. NASW-2592, an agreement between the University and the National Aeronautics and Space Administration for the operation of WESRAC through January 31, 1975.

WESRAC has operated since 1967 at the University of Southern California, Los Angeles, as part of the School of Business Administration.

Additional facts on activities included in this report are available if desired.



Radford G. King
Radford G. King

Director

WESTERN RESEARCH APPLICATION CENTER

ANNUAL REPORT

FOR THE PERIOD ENDING 31 JANUARY 1975

TABLE OF CONTENTS

LETTER OF INTRODUCTION	1
I. ADMINISTRATION	2
II. MARKETING	5
III. INFORMATION SYSTEMS	8
IV. ATTACHMENTS	10

I. ADMINISTRATION

ADMINISTRATION

To more closely align University supervision with WESRAC operations, control of the Center's contract was reassigned to the School of Engineering. Previously, administration of the contract was handled by the Graduate School of Business Administration. Provision for this change was made during the fourth quarter with actual transfer of authority effective February 1, 1975.

In conjunction with this administrative change, new principal investigators were appointed. Dr. Jack Munushian is Associate Director of the Electronic Sciences Laboratory and Chairman of the Computer Science Program. He initiated development of and is the director of the Interactive Television System and is the principal faculty advisor to the School of Engineering's Industrial Associates Program.

Mr. Jack Nilles, co-principal investigator, is the Director of USC's Interdisciplinary Program Development Office. He is responsible for the initiation and development of new interdisciplinary research and education programs on a university-wide basis.

Mr. Radford G. King was appointed to the position of Director and assumed active leadership of the Center on December 20, 1974. A successful private businessman specializing in water treatment products, systems, and services, Mr. King has a background as an inventor, business developer, and innovator of product development techniques. He received a Bachelor of Science degree in 1956 from the School of Business Administration, Menlo College, and a Master of Business Admin-

istration degree in Administrative Management in 1969 from the University of Southern California.

This new management team participated in the development of the contract proposal for the continuation of the WESRAC operation through 1975 and the establishment of objectives and programs under the new administrative alignment within the School of Engineering.

II. MARKETING

MARKETING

Two major new marketing programs were initiated during 1974: (1) the "Unlimited Search Plan" and (2) the sales representative plan for Northern California. WESRAC also participated in one major trade show -- the Western Electronics Show and Convention (WESCON).

The "Unlimited Search Plan" was a six-month program designed to offer clients multiple searches for a fixed fee. Although initial response was quite favorable, interest waned and the plan was not renewed. Further information on the specifics of this program may be found in the 1974 Two-Quarter Report, which covered the period of February through July.

In an attempt to penetrate further into the Northern California market, a representative was hired in September on a three-month trial basis. An altered distribution of contract funds under the 1975 agreement prevented the extension of this program. However, as soon as economically feasible, Mr. King expects to re-establish a sales office in the San Francisco Bay area.

The 1974 WESCON show featured electronic equipment and systems for data acquisition and processing. WESRAC decided to participate to make the electronics community aware of WESRAC's computerized, on-line information retrieval system. (This system is discussed further in the Information Systems section of this report.)

Sales during the contract period totaled \$137,770. This figure is based on products or services sold, produced and delivered during

the reporting period. The breakdown by products groups by dollars and percentage of total sales was: Searches, \$64,230 (46.6%); DATACON, \$14,570 (10.6%); Documents, \$15,240 (11.1%); Redken Fund, \$33,140 (24.1%); Otology Project, \$9,930 (7.2%); Other, \$660 (.4%). Included in the Documents sales figure was \$9,074 of document sales to the Redken Fund; combined with the sales to Redken of \$33,140, the sales to the Redken Fund was \$42,214 or 30.6% of total sales.

III. INFORMATION SYSTEMS

INFORMATION SYSTEMS

Expansion and improvement of the on-line retrieval service continued throughout the year. The ERIC thesaurus was added to the system. Output improvements were also made. It is anticipated that increasing the number and variety of data bases available on-line will increase the number of potential users. Therefore, expansion of the service will be a continuing process. The ERIC thesaurus is an especially important acquisition as it gives the user greater flexibility in determining the best strategy for his search.

Improvements in the on-line system enable users to more exactly duplicate the logic used by the computer during batch searching. This is achieved by increasing the number of variations in the search logic equation which may be entered for any one search.

Total terminal output time was reduced with a change to the direct access work file. Previously, the system had employed the sequential work file.

IV. ATTACHMENTS

Attachment 1

WESRAC USERS BY TYPE OF PURCHASE
 (By contract quarter beginning Feb. 1, 1974)

<u>1974 Quarter</u>	<u>Annual Clients</u>		<u>Ad hoc Clients^a</u>		<u>Only Document Purchased</u>	<u>Total Users</u>
	<u>Large</u>	<u>Small^b</u>	<u>Large</u>	<u>Small^b</u>		
1st	20	21	0	21	52	114
2nd	29	33	1	18	55	136
3rd	35	35	5	22	43	140
4th	10	17	14	16	27	84

^aAd hoc clients are those buying searches without an annual deposit.

^bSmall is under 500 employees.

Attachment 2

DISTRIBUTION OF WESRAC USERS* BY TYPE OF BUSINESS

(in percent of all users)

(By contract quarter beginning Feb. 1, 1974)

1974 <u>Quarter</u>	<u>TYPE OF BUSINESS</u>					
	<u>Indus-</u> <u>trial</u>	<u>Commer-</u> <u>cial</u>	<u>Govern-</u> <u>ment</u>	<u>Medical</u>	<u>Educa-</u> <u>tional</u>	<u>Other</u>
1st	68%	12%	5%	2%	12%	0%
2nd	68%	13%	3%	3%	11%	2%
3rd	63%	14%	1%	3%	13%	5%
4th	53%	11%	5%	5%	17%	9%

* Does not include document buyers.

Attachment 3

ABSTRACTS AND CITATIONS DELIVERED TO CLIENTS
COMPARED TO DOCUMENTS ORDERED
(By contract quarter beginning Feb. 1, 1974)

<u>1974 Quarter</u>	<u>Abstracts and Citations</u>	<u>Hard Copy and Microfiche</u>
1st	8,846	1,085
2nd	7,626	1,906
3rd	10,254	765
4th	7,952	1,518
Total to date	34,678	5,274